



Northern Engraving Corporation

*Cooperative Environmental Agreement
Annual Report 2005*



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Cooperative Environmental Agreement Annual Report 2005

Contents

Introduction	page 3
Collective Summary of 2005	3
Cooperative Agreement Report	4
Interested Persons Group	4
Commitments to Superior Environmental Performance	4
Operational Flexibility	5
Overall Assessment of the Success of the Agreement	6
Appendices	
1. Sparta	
a. Data	7
b. Objectives and Targets for 2005/2006	10
2. Holmen	
a. Data	13
b. Objectives and Targets for 2005/2006	16
3. West Salem	
a. Data	18
b. Objectives and Targets for 2005/2006	21
4. Galesville	
a. Data	23
b. Objectives and Targets for 2005/2006	26
5. The Glossary	27

The logo of Northern Engraving Corporation is a circular emblem. It features a central green circle with a white cross-like shape inside. Surrounding this is a yellow ring with the words "NORTHERN" at the top and "ENGRAVING" at the bottom. The outermost ring is blue with white wavy lines. The company name "Northern Engraving Corporation" is written in a bold, black, serif font across the middle of the page.

Northern Engraving Corporation

Introduction

On June 10, 2002, following a Public Comment Period and formal public Hearing, the Wisconsin Department of Natural Resources (DNR) and Northern Engraving Corporation (NEC) signed an Environmental Cooperative Agreement that included the NEC facilities in Sparta and Holmen, Wisconsin. This Agreement was amended on June 23, 2003, to allow the inclusion of the West Salem and Galesville, Wisconsin, facilities. The agreement was established and is maintained pursuant to Section 299.80, Wis. Statutes, to evaluate innovative environmental regulatory methods including whole-facility regulation.

Northern Engraving Corporation is an active and dedicated steward of the environment. Internally, the environmental policy commits the company to reducing waste, continually improving processes, and doing no harm to the environment. All facilities are registered to the international environmental standard, ISO 14001, and receive annual audits from one of our third-party registrars, Quality Management Institute or NSF International Registrations. The environmental management system gives the plants the tools needed to analyze environmental impacts, set objectives and targets, develop supporting programs, review results and redirect efforts. By using these tools and developing employee involvement, each facility has experienced remarkable success (See Appendices).

Collective Summary of 2005

Data from calendar year 1996 through calendar year 2005 show that plant emissions of volatile organic compounds (VOC) and hazardous air pollutants (HAP) from the Cooperative Agreement facilities decreased 63% (221 tons) and 91% (119 tons), respectively, while water use dropped 73% (93 million gallons). Although corporate VOC's increased 19% (20.5 tons) in 2005 compared to 2004, the performance indicator improved. The delisting of 2-butoxyethanol by the EPA played a significant part in the HAP emissions decrease of 30% (5.1 tons) in 2005.

During the 1996-2005 period, the facilities' generation of hazardous and solid wastes decreased 68% (42,881 gallons) and 58% (1,050 tons), respectively. Reformulation of sprays from a solvent base to water base significantly reduced hazardous waste generation while increasing the quantity of wastewater treated as non-hazardous. Similarly, oil absorbents were reclassified from solid to non-hazardous waste, recycled, and returned to Northern Engraving through Circle Environmental. These changes contributed significantly to the facilities' collective 137% increase (11,294 gallons) in non-hazardous waste between 1996 and 2005 (See Appendices).

The environmental management system was instrumental in the success of the corporation's environmental initiatives. In 2005, the Cooperative Agreement facilities set a total of 14 objectives accompanied by 19 specific targets. The most significant environmental successes of 2005 were the

- 1) Implementation of a comprehensive plastic recycling program at all facilities and
- 2) Reduction of water usage at the Sparta facility.

Cooperative Agreement Report

Interested Persons Group:

On May 27, 2005, an update report was sent to all members via email. This included activities related to remediation, transfers of equipment, and the launching of new programs. Attached was an electronic copy of the 2004 Annual Cooperative Agreement.

On November 10, the Northern Engraving Stakeholders Group, represented by Mark Wienkes, Ron Amel, and NEC management was joined by Mark McDermid and Mark Harings from the Wisconsin Department of Natural Resources and Cara Coburn from the Wisconsin Legislative Audit Bureau. They met in Sparta to review changes and discuss the state of environmental management. After an introduction to the restructuring of the company, the Group compared environmental results from 2004 to the 2005 year-to-date results, discussed the construction permit applications received and expected, and evaluated the findings of environmental inspections and audits. Several sets of parts from new programs were displayed, and there was considerable discussion of the manufacturing processes involved and the way they affect the environment. In addition the Group reviewed the 2005 environmental objectives and targets and walked through the manufacturing facility.

During 2005, Jordan Skiff, Department of Public Works, Sparta, WI, discontinued his membership and Dr. Ron Amel, professor of chemistry at Viterbo University, assumed Dr. Michael Collins membership while Dr. Collins is on sabbatical.

Commitment to Superior Environmental Performance:

Monthly internal audits of the environmental management system continue to be conducted at each facility. These are done by trained and impartial auditors from corporate headquarters and the facilities.

Annual audits of the environmental management system were conducted by external auditors at each facility. For 2005, these audits totaled eight man-days. Two minor nonconformities were found at the Sparta facility. The other facilities had no nonconformities. The Sparta findings were as follows:

- 1) Failure to define the scope of the Environmental Management System and its boundaries, and
- 2) The organization shall ensure that any person performing tasks for it or on its behalf that have the potential to cause a significant environmental impact identified by the organization is competent on the basis of appropriate education, training or experience, and shall retain associated records.

Both nonconformities were new requirement of the 2004 revised standard. The first was defined within the quality scope but needed to be stated separately. The second was in draft at the time of the audit. The nonconformities were quickly corrected and accepted by the registration authority.

Positive findings of the external auditors included:

- Tracking and maintenance of the aspect listing and the process flow chart reviews were very good;
- The tracking and recording/charting of objectives, targets and programs were very solid;
- The internal audits were well-documented and thorough; and
- The management commitment to preventing pollution, compliance and continual improvement was evident throughout the audit process.

All facilities were recommended for continued registration.

None of the Cooperative Agreement facilities received a notice of violation in 2005.

Each manufacturing facility reviewed all environmental aspects of their operations and established each one's significance based on legislative and regulatory requirements, the degree impact on health and the environment, and the frequency of this impact. Objectives and targets were then established to address the significant aspects. Environmental objectives and targets for 2005 and 2006 can be reviewed in greater detail in the appendices.

Operational Flexibility: (For a brief explanation of acronyms and terms, see the glossary at Appendix 5)

Time saved in obtaining air permits:

Three construction permit applications were submitted in 2005. In all instances, formal written permission to construct was received within 21 days of submittal. Time saved under the Agreement was estimated to total 93 days.

Time saved by the reduction in record keeping and administrative requirements:

These were established during the first year of the Agreement and are as follows:

<u>Requirement Eliminated:</u>	<u>Approximate Time Saved:</u>
• Calculations for demonstrating RACT compliance	
West Salem	3.5 hours/day
Sparta	2.5 hours/day
• Calculation of VOC and HAP emissions	0.75 hr/day per facility
• Compiling formulas for demonstrating LACT compliance	
Sparta	10 hr/mo
Holmen	10 hr/mo
West Salem	20 hr/mo
Galesville	15 hr/mo
• Reduced several of the requirements in the Operating Permits for submittal of the Summary of Monitoring Requirements and Certification of Compliance	10 hr/yr per facility

Energy savings from avoiding the use of the incinerator:

Northern Engraving estimates a 2500 MCF/month savings in natural gas usage from the shutdown of the Sparta incinerator for the period 1 May through 31 September.

Prior to the Cooperative Agreement, West Salem was required to operate two incinerators from 1 May through 31 September to meet permit requirements. In 2005, it is estimated that West Salem avoided the usage of over 2400 MCF of natural gas associated with incineration for RACT.

Overall Assessment of the Success of the Agreement:

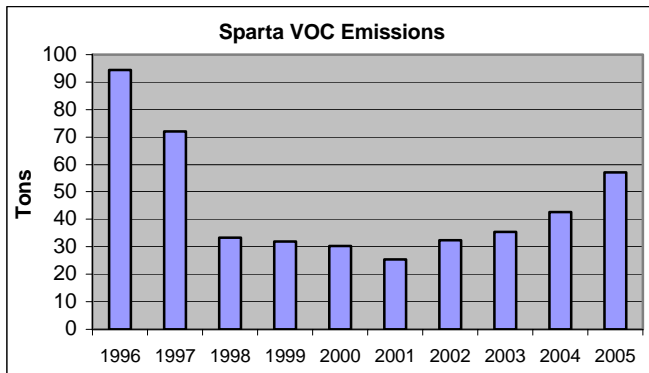
Recognition/awards: In 2005, Northern Engraving Corporation neither sought nor received public recognition/awards for its efforts concerning the Cooperative Agreement or its environmental management system.

For companies seriously pursuing improvements in environmental performance, the Cooperative Agreement poses few additional difficulties or challenges that are not already present when implementing a meaningful environmental management system. It is important to recognize, however, that it takes significant energy and commitment to develop a meaningful system and to implement new programs in support of recurring objectives. The system must continuously evolve as it develops responses to the rise and fall of sales and the changing mix of production requirements. This requires the use of performance indicators that measure the efficiency of environmental initiatives while accounting for rapidly changing manufacturing challenges. Emphasis continues to shift from traditional environmental issues (VOC emissions and hazardous waste reduction) to operational efficiencies (equipment utilization, raw material usage, quality management ...). In 2005, environmental objectives were designed to recognize the interdependence of the quality and environmental systems and the mutual benefits derived from the success of each.

Communications with the Department of Natural Resources continues to be excellent, and the response to requests for permits, changes and information is professional and supportive.

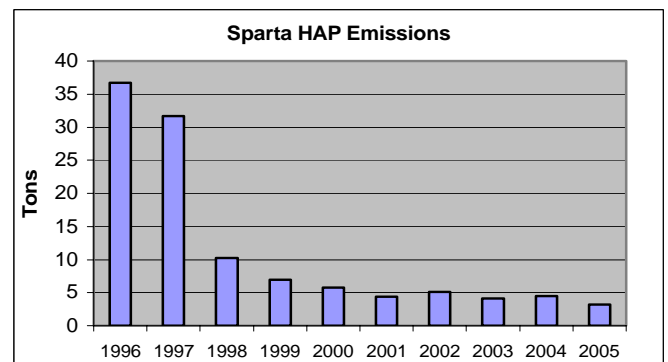
Appendix 1: Sparta Air Emissions

		1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
VOCs (tons/year)		94.3	72.0	33.4	32.0	30.3	25.4	32.5	35.4	42.7	57.0
NOx		5.7	7.6	5.1	4.0	4.7	4.62	5.00	5.30	5.71	*
CO		1.2	1.7	2.0	2.8	2.9	2.63	2.10	2.00	2.52	*
CLEAN AIR ACT HAPs (lbs/yr) Blank cells reflect no usage								* Awaiting data from the WDNR			
CHEMICAL NAME	CAS #	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Glycol Ethers		9,877	12,490	3,704	4,900	5,910	4,003	4,197	4,639	5,180	
0Benzene	71-43-2								1		16
Cumene	98-82-8	258	101	178	67	42	182	12	9		
Dimethylformamide	68-12-2	84	819	435							
Ethyl Benzene	100-41-4	3,210	2,587	1,204	895	771	577	831	455	400	600
Formaldehyde	50-00-0	8	2	3	2	3	4	6	5		
Hydrogen Fluoride	7664-39-3	140	140	252	314	305	265	197	192		
2,2,4 Trimethylpentane	540-84-1							184	214	200	280
Isophorone	78-59-1	1,085	3,917	1,986	983	558	314	338	101	880	1,300
Methyl Alcohol	67-56-1	204	187	112	84	57	31	95			
MEK	78-93-3	13,859	11,532	1,753	867	923	540	232	142	140	480
MIBK	108-10-1	7,248	4,094	84	136	168	84	138		60	20
Methylene Chloride	75-09-2	2,201	2,351	5,089				101	166	220	360
Naphthalene	91-20-3	202	1,565	387	81	120	76	223	117	220	200
Toluene	108-88-3	21,636	16,431	844	736	245	315	171	28	200	640
Xylene	1330-20-7	11,297	4,722	2,749	4,805	2,387	2,429	3,468	1,936	1,240	2,240
Nickel Compounds	7440-02-4					10	10	10	10		
Perchloroethylene	127-18-4	2,152	2,398	1,665				55	91	140	200
Methanol	67-56-1								89	80	120
TOTAL (tons)		36.7	31.7	10.2	6.9	5.8	4.4	5.1	4.1	4.5	3.2



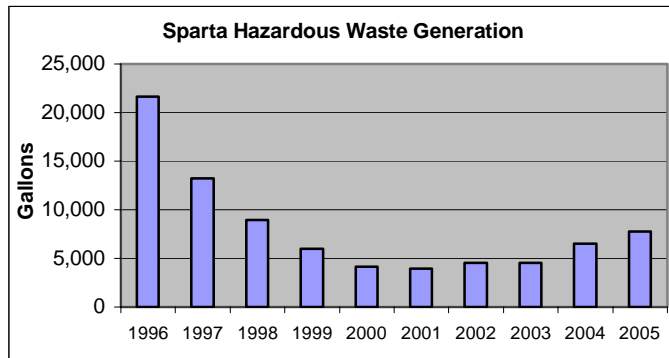
The Sparta facility experienced a significant increase in sales in 2005 with an accompanying increase in VOC emissions. The sales to VOC emissions ratio showed a minor improvement in efficiency.

The reduction in HAPs in 2005 is the result of the delisting of 2-butoxyethanol by the EPA.



Appendix 1: Sparta Hazardous Waste Generation

		1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Solvent Waste	gallons	9,374	5,388	4,309	1,762	439	1,265	1,705	1,045	1,210	1,540
Liquid Coating Waste	gallons	8,470	4,565	2,200	1,678	1,210	825	935	660	990	1,375
Solid Coating Waste	gallons	1,650	1,045	852	1,045	1,169	715	660	550	770	935
Ink Waste	gallons	1,540	1,375	1,072	729	798	550	550	550	550	550
Norlens Waste	gallons	605	478	522	358	0	0	0	0	0	0
Alodine Sludge	gallons	NA	385	0	220	138	110	0	55	110	55
Still bottoms	gallons	NA	NA	NA	165	385	495	660	550	660	825
Hydroxide Sludge	tons	53.8	0	0	0	0	0	0	0	0	0
Solvent Waste Distilled for Reuse									1100	2,200	2,475
Sparta Totals	gallons	21,639	13,236	8,955	5,957	4,139	3,960	4,510	4,510	6,490	7,755

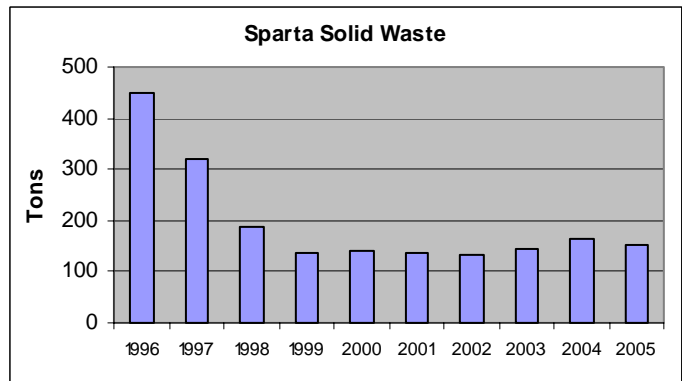


The 2005 sales to hazardous waste ratio improved by over 15%, indicating an improvement in efficiency over 2004 and 2003. Much of the increase in waste generation is attributable to an increase in coating requirements.

Solid Waste

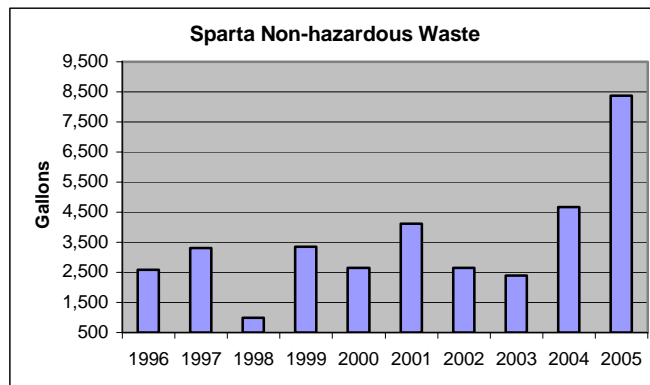
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Tons	448	321	188	137	141	136	131	146	166	154

New recycling opportunities and more efficient manufacturing processes resulted in reduced solid waste generation while sales increased significantly.



Appendix 1: Sparta Non - Hazardous Waste Generation

	Unit	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Damascene Sludge	gallons	1,100	1,760	275	275	495	660	660	55	660	1,100
Used Oil	gallons	1,375	1,320	605	935	605	1,815	550	715	440	2,435
Oil Absorbents	gallons	110	220	110	1,210	1,210	1,320	1,265	1,408	3,245	4,235
Norlens Waste	gallons	0	0	0	55	330	330	165	220	220	330
THFA waste (one time)	gallons	0	0	0	880	0	0	0	0	0	0
Water base Adhesive Hydroxide Sludge/ Wastewater Treatment Sludge	gallons									110	275
	cubic yd	0	12	24	36	24	24	36	12	12	12
Totals	gallons	2,585	3,300	990	3,355	2,640	4,125	2,640	2,398	4,675	8,375
	Cubic yd	0	12	24	36	24	24	36	12	12	12



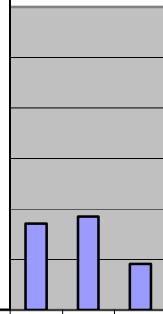
Of the 3700 gallons increase in non-hazardous waste, used oil accounted for 1990 gallons and oil absorbents added another 990. The addition of several injection molding machines to the Sparta production floor significantly contributed to this increase.

Water Use

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Gallons	102,783,428	77,764,324	59,139,124	54,527,704	51,394,154	47,438,908	33,724,328	34,299,540	36,953,024	18,144,984

This reflects a major environmental system success. The need for water reduction was discovered through the Environmental Management Department, an objective was added to the Sparta EMS, and an improvement program was established. Through the process changes and equipment modifications implemented by the plant chemist, water usage was reduced over 50% in 2005.

1996 1997 1998 1999 2000 2001 2002 2003 2004 2005

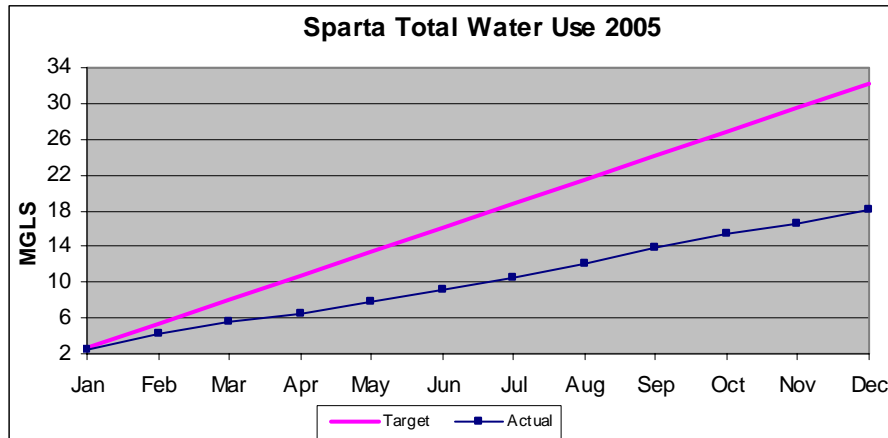


Appendix 1: Sparta's Objectives and Targets Program

Results for 2005

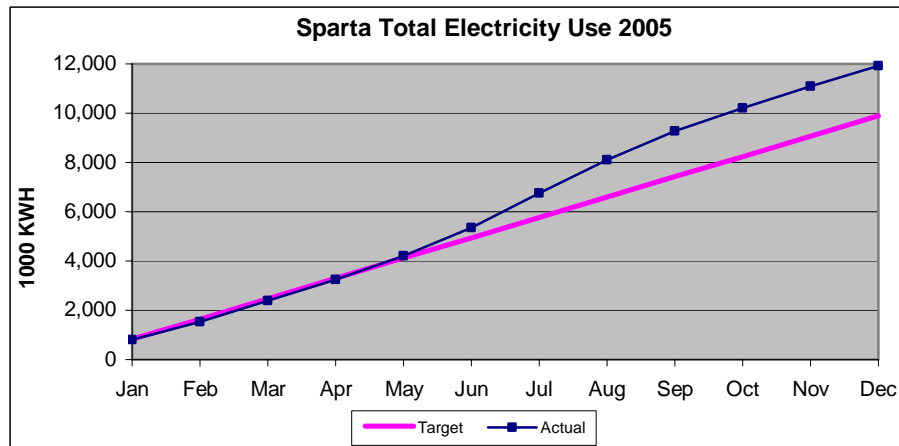
Objective 1: Reduce facility water usage by 12%, 2005 vs. 2004

Water usage was reduced by over 18,000,000 gallons (50%) in 2005. This was accomplished at the processes by reusing water, reconfiguring and replacing nozzles, and reducing water pressures.



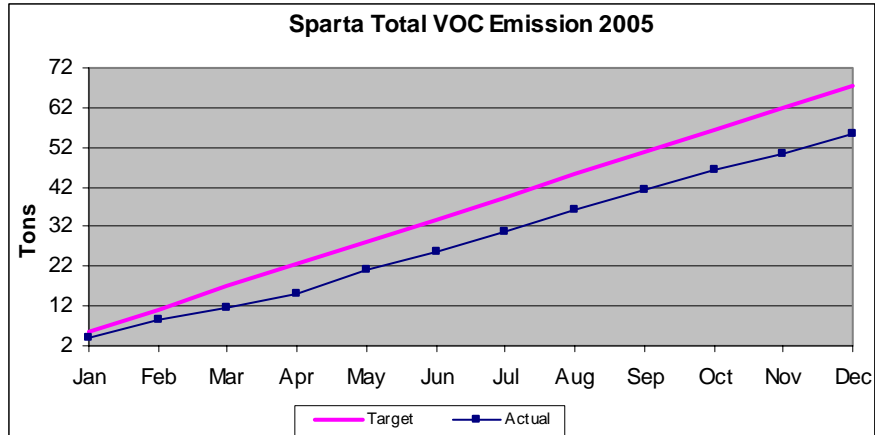
Objective 2: Reduce facility electricity consumption by 4%, 2005 vs. 2004.

Consumption increased 16% in 2005. Increased sales, the addition of injection molding, and the unexpected expansion to a third shift were major contributing factors.



2005 Electricity (1000 KWH)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
	818	725	842	874	955	1147	1382	1368	1154	936	881	850	11,932

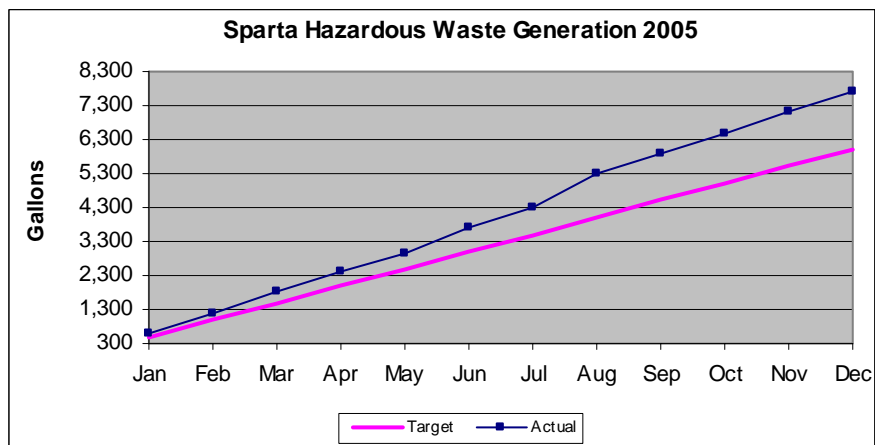
Objective 3: Reduce facility VOC emissions by 6% from a projection of 72 tons for 2005. In addition to meeting the VOC emissions goal, the sales/VOC emissions ratio for 2005 also improved 6% when compared to 2004.



2005	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Tons	4.11	4.37	3.03	3.75	5.84	4.77	4.79	5.83	4.96	5.01	4.13	4.95	55.54*

*This reflects only emission from manufacturing. The VOC emissions from the Design Department are omitted.

Objective 4: Reduce facility hazardous waste by 5% from a projection of 6,325 gallons for 2005. As discussed in the hazardous waste data, much of the increase was the result of increased production in the coating department. Hazardous waste reduction was continued as an objective for 2006.



2005	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Gallons	605	550	660	605	550	770	550	990	605	605	605	605	7,700

Sparta's 2006 Objectives and Targets

Objective 1: Reduce facility VOC emissions by 5%, 2006 vs. 2005

Objective 2: Reduce facility energy consumption

Target: Reduce facility electricity consumption by 3%, 2006 vs. 2005.

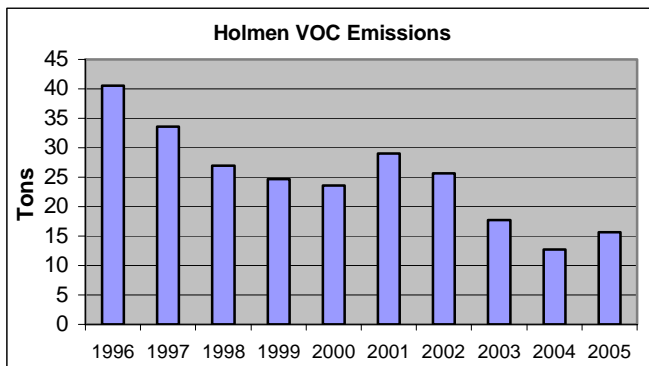
Target: Reduce facility Natural Gas/LPG consumption by 5%, 2006 vs. 2005

Objective 3: Reduce facility hazardous waste generation by 10%, 2006 vs. 2005.

Appendix 2: Holmen Data

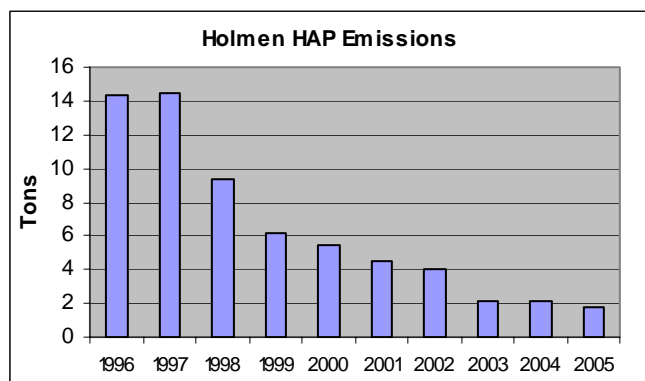
Air Emissions

		1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
TOTAL VOCs (tons/year)		40.5	33.6	27.0	24.6	23.6	29.0	25.7	17.7	12.7	15.6
NOx		1.0	1.2	0.98	1.02	0.98	0.85	0.72	0.55	0.4	*
CO		0.2	0.2	0.20	0.20	0.20	0.17	0.14	0.11	0.1	*
CLEAN AIR ACT HAPs (lbs/yr) Blank cells reflect no usage						* Awaiting data from the WDNR					
CHEMICAL NAME	CAS #	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Glycol Ethers		9,792	9,073	8,987	8,674	8,077	8,080	6,893	3,660	3,980	3,420
Cumene	98-82-8	351		3	14	17	29	11	2		
Ethyl Benzene	100-41-4		322	11	23	3	5	56	25	40	
n-Hexane	110-54-3		238	414	102	86	86	391	340		
2,2,4 Trimethylpentane	540-84-1								13	20	20
Methyl Methacrylate	80-62-6								3		
Isophorone	78-59-1	1,291	36	628	737	225	5	2			
MEK	78-93-3	3,104	2,017	3,403	1,513	1,111	330	82	84	240	200
MIBK	108-10-1	58			15						
Naphthalene	90-20-3	49	113	63	158	7	15	50	20	20	80
Toluene	108-88-3	13,491	13,618	3,778	152	307	62	88	150		20
Xylene	1330-20-7	507	3,418	1,541	910	1,031	406	523	28		
TOTAL (tons)		14.3	14.4	9.4	6.1	5.4	4.5	4.0	2.2	2.2	1.9



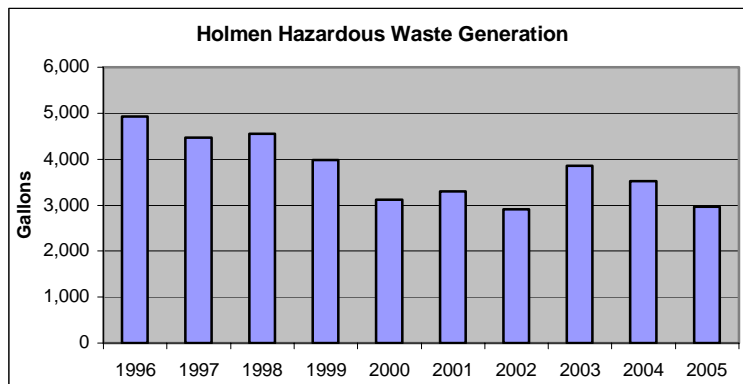
One ton of this increase resulted from the addition of 275 gallons of virgin screen cleaning solvent to replace spent recycled solvent. Another ton came from increased usage of litho wash and IPA. Although the Sales/VOC emissions indicator shows an efficiency reduction, it is the second best efficiency rating since 1996. Only 2004 is better.

The reduction in HAP emissions in 2005 is the result of the delisting of 2-butoxyethanol by the EPA.



Appendix 2: Holmen Hazardous Waste Generation

		1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Solvent Waste	gallons	3,224	2,548	3,068	2,338	1,354	1,485	1,375	2,365	1,540	935
Solvent Waste Distilled for Reuse	gallons									715	1100
Ink Waste	gallons	1,705	1,925	1,485	1,650	1,760	1,815	1,540	1,485	1,265	880
Flexlens	gallons										55
Total	gallons	4,929	4,473	4,553	3,988	3,114	3,300	2,915	3,850	3,520	2,970

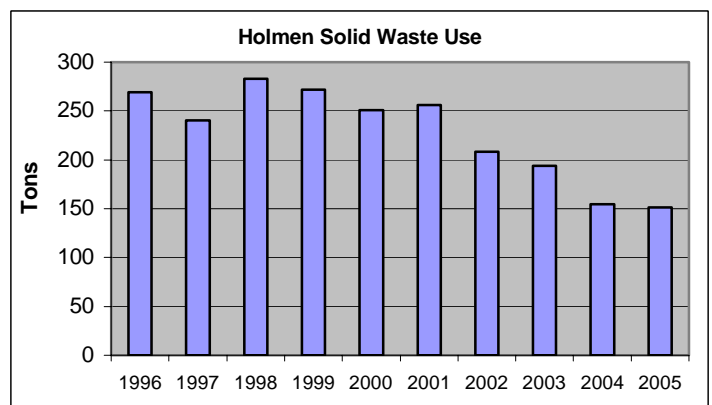


The distillation of waste solvent for reuse in the facility continues to be successful. Improved ink management resulted in a 30% reduction in waste ink.

Solid Waste

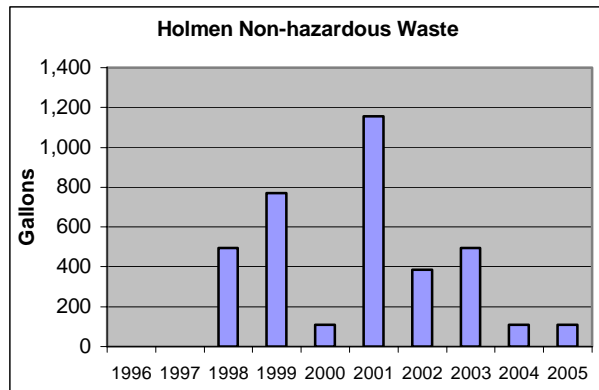
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
tons	269	240	283	272	251	256	208	194	154	151

In July 2005, Holmen began recycling plastic waste. This is the major contributor to the 3 ton reduction in solid waste.



Appendix 2: Holmen Non-hazardous Waste Generation

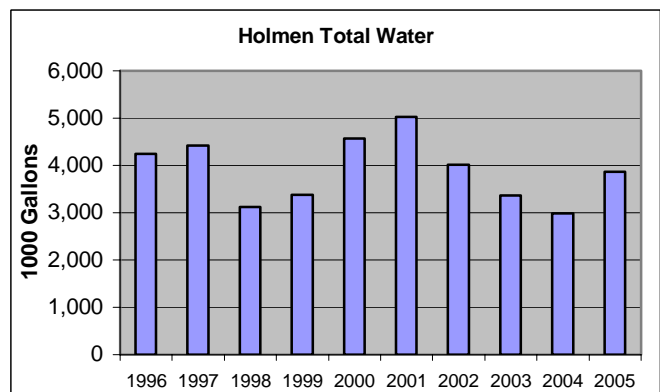
	Unit	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Oil Absorbents	gallons	0	0	0	220	0	0	110	0	0	0
Used Oil	gallons	0	0	275	550	110	1,155	275	330	110	55
Screen Clean Solvent (1 time)	gallons	0	0	220	0	0	0	0	0	0	0
Digital Ink Waste	gallons	0	0	0	0	0	0	0	165	0	55
Total	gallons	0	0	495	770	110	1,155	385	495	110	110



Water Use

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Gallons	4,241,500	4,421,400	3,122,900	3,380,700	4,561,400	5,023,700	4,013,444	3,371,356	2,989,240	3,860,940

Very little water is used in Holmen's manufacturing processes. Much of the increase in 2005 is attributed to the flushing method used to keep air makeup unit intake louvers open. This will be addressed in 2006.



Appendix 2: Holmen's Objectives and Targets Program

Results for 2005:

- Objective 1: Reduce exposure to isocyanate containing materials in the Flexlens Department
- Target: Complete an audit of isocyanate use and report to the Environmental Committee by 2/24/05
 - Target: Develop an action plan by 3/15/05
 - Target: Complete the action plan by 12/31/05

All targets were met on schedule. The following were among the actions taken:

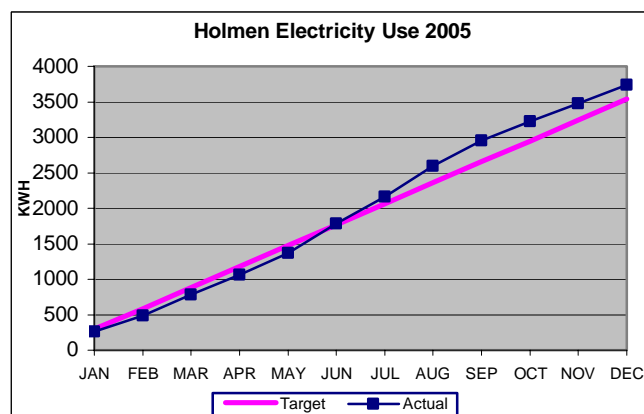
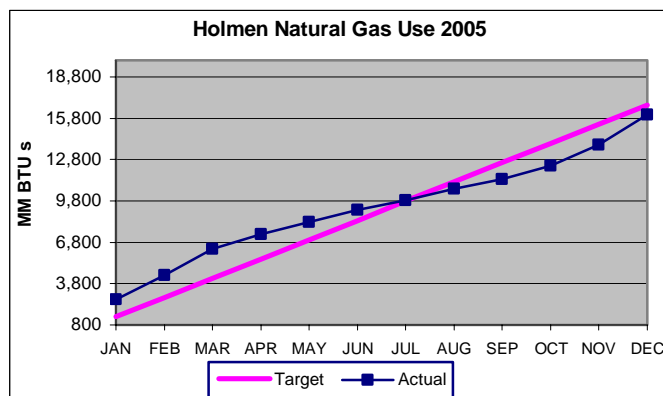
- Improved the climate control, including humidity;
- Rearranged the department to readily identify damaged trays;
- Conducted a seminar to include isocyanate traits, protective equipment, and industrial hygiene

- Objective 2: Reduce facility energy consumption

Target: Reduce natural gas/LPG consumption by 2% 2005 vs. 2004

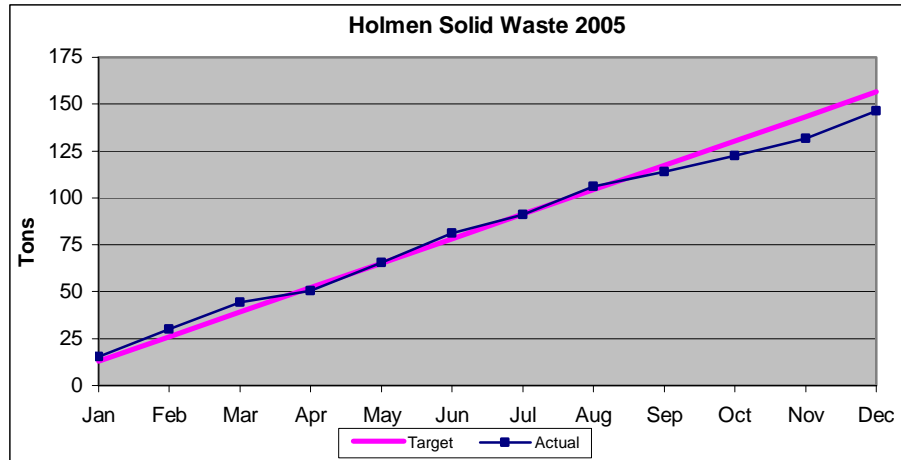
Target: Reduce electricity consumption by 2% 2005 vs. 2004.

2005 natural gas/LPG consumption was reduced by 6% while electricity use increased 3%. The reduction of energy consumption remains a target for 2006.



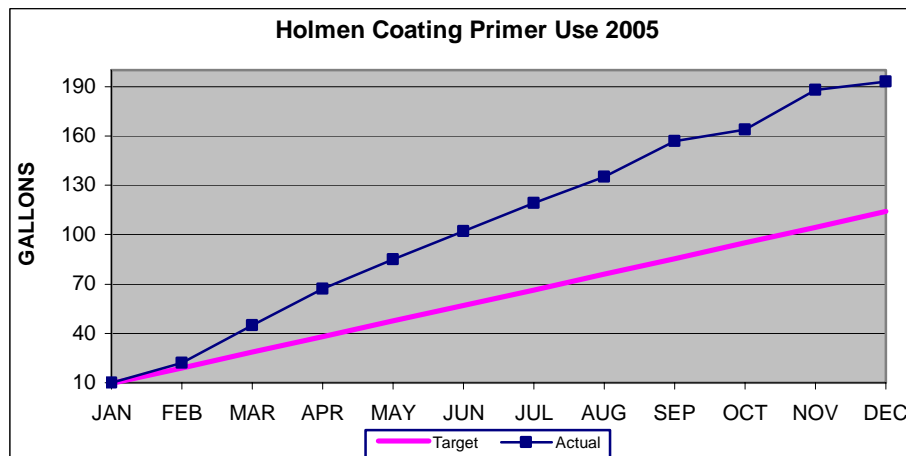
Objective 3: Reduce facility solid waste generation by 5% 2005 vs. 2004

Solid waste was reduced by 11% (18.3 tons). A vigorous plastic recycling program contributed significantly to this success.



Objective 4: Reduce the usage of the current coating primer by 30%, 2005 vs. 2004.

In 2005, sixty-three jobs were converted to a new UV primer (free of VOC's). However, these jobs represented only a small portion of coating primer in comparison to the one major user, and unfortunately it cannot be converted. Conversion to UV primer will remain an objective in 2006.



Holmen's 2006 Objectives and Targets:

Objective 1: Reduce the usage of coating primer by converting 40% of viable jobs to UV primer

Objective 2: Reduce energy consumption

Target: Reduce natural gas/LPG consumption by 2% for 2006 vs. 2005

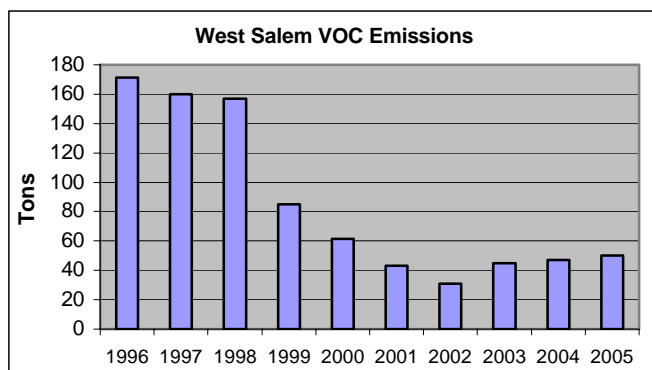
Target: Reduce electricity consumption by 2% for 2006 vs. 2005

Objective 3: Identify 50 jobs that can be made more environmentally efficient by conversion from screening to lithography or digital printing processes and submit them for changes by December 31, 2006.

Appendix 3: West Salem Data

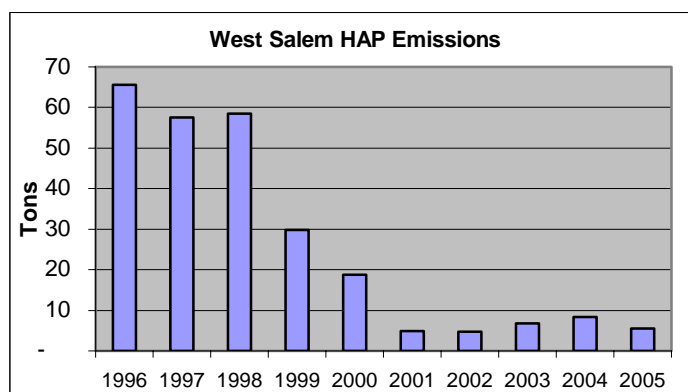
Air Emissions

		1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
VOCs (tons/year)		171.3	159.9	157.0	85.0	61.3	43.0	31.0	44.7	47.0	50.1
NOx		1.50	2.08	2.58	1.78	2.04	2	2.06	1.10	2.09	*
CO		0.34	0.47	1.43	1.13	1.45	1.53	1.55	0.80	1.07	*
CLEAN AIR ACT HAPs (lbs/yr) Blank cells reflect no usage								*Awaiting data from the WDNR			
CHEMICAL NAME	CAS #	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Glycol Ethers	NA	7,964	13,749	16,931	13,327	11,010	6,497	5,312	6,728	9,400	4,740
MEK		30,969	24,648	45,173	29,385	20,423	352	1,489	2,276	2,320	1,680
Methanol	67-56-1	6,381	6,415	3,554	397	76	181	169	209	140	200
Triethylamine	121-44-8			255	581	1,956	1,606	433	159	300	80
2,2,4 Trimethylpentane	540-84-1								106	240	260
Toluene	108-88-3	37,071	13,191	5,135	3,278	816	596	1,421	3,090	3,340	3,680
Xylene	1330-20-7	21,423	22,804	21,478	6,389	1,472	177	335	414	620	260
Vinyl Acetate	108-05-4			198	106	31	9				
Ethyl Benzene	100-41-4	3,601	6,660	7,951	2,677	671	176	72	179	80	
MIBK	108-10-1	23,717	26,197	15,028	3,027	660	35	1			60
Naphthalene	91-20-3	10	33	128	117	42	107	72	41	40	80
Cumene	98-82-8	2	9	388	261	280	6	8	15		
Isophorone	78-59-1	73	1,426	830	94						
Methyl Methacrylate	80-62-6						89	17	1		
M-Xylene	108-38-3		2	62						240	160
P-Xylene	106-42-3									60	40
O-Xylene	95-47-6									100	80
Formaldehyde	50-00-0			5	2					80	18
TOTAL (tons)		66	58	59	30	18.7	4.9	4.7	6.8	8.4	5.5



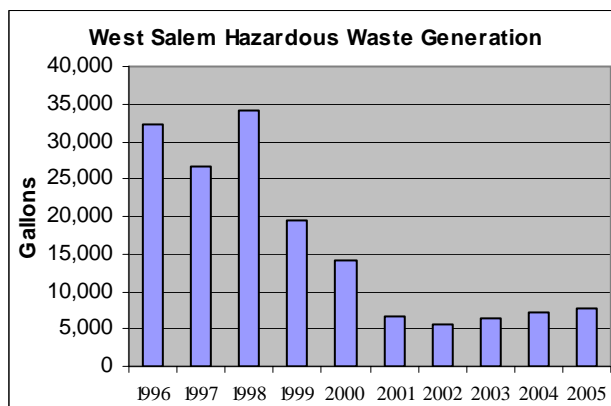
The increase in VOC emission also reflects a reduction in the efficiency of use when compared to sales volumes. This is an item of concern for management in 2006.

W Salem continues to closely monitor the use of HAP's. The reduction in 2005 also reflects the delisting of 2-butoxyethanol from the CAA list of hazardous chemicals.



Appendix 3: West Salem Hazardous Waste Generation

		1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Solvent Waste	gallons	30,470	22,808	19,363	10,644	6,240	2,184	1,595	2,200	2,475	2,750
Solvent Waste Distilled for Reuse	gallons	NA	NA	NA	NA	3,120	2,080	2,349	2,536	2,384	2,772
Liquid Coating Waste	gallons	880	2,695	9,075	6,655	3,685	1,815	1,100	1,100	1,870	1,870
Solid Coating Waste	gallons	770	990	5,445	2,035	935	550	440	550	550	385
Waste Absorbents	gallons	110	165	165	0	55	55	0	55	0	55
Total	gallons	32,230	26,658	34,048	19,334	14,035	6,684	5,484	6,441	7,279	7,832

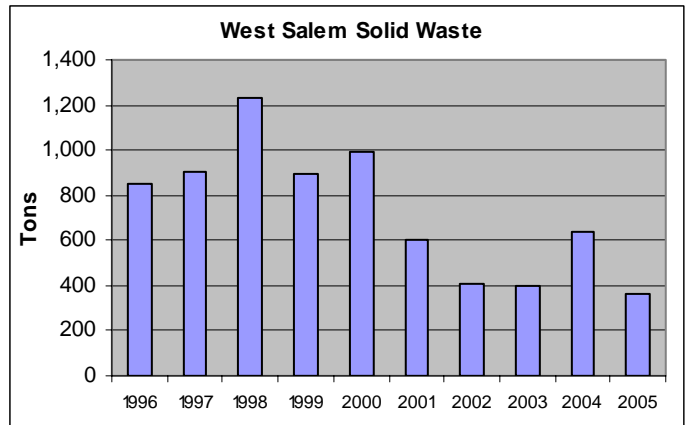


The increase in solvent waste and distilled solvent reflects the increase in coating and the launch of new work. Hazardous waste reduction is an objective for 2006.

Solid Waste

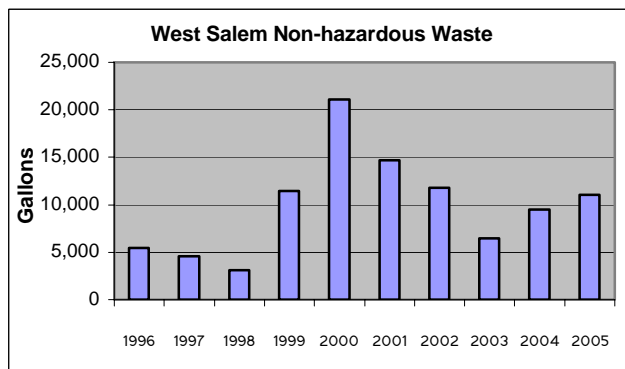
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
tons	854	902	1235	893	990	599	406	400	636	363

The dramatic reduction in solid waste is the direct result of the vigorous plastic recycling program established in May 2005.



Appendix 3: West Salem Non-hazardous Waste Generation

	Unit	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Mask Washer Waste	gallons	2,236	2,184	520	0	0	0	0	0	990	1,925
Damascene Sludge	gallons	0	0	52	110	884	275	275	110	110	55
Used Oil	gallons	3,200	2,270	2,500	3,125	2,040	1,325	950	1,200	1,705	1,700
Water based Paint	gallons	0	0	0	8,216	18,148	13,090	10,319	3,750	4,840	5,555
Oil Absorbents	gallons	0	0	0	0	0	0	55	1,430	1,842	1,815
Oily Water Waste	gallons	0	0	0	0	0	0	110	0	0	0
Antifreeze	gallons	0	110	0	0	0	0	55	0	0	0
Total	gallons	5,436	4,564	3,072	11,451	21,072	14,690	11,764	6,490	9,487	11,050

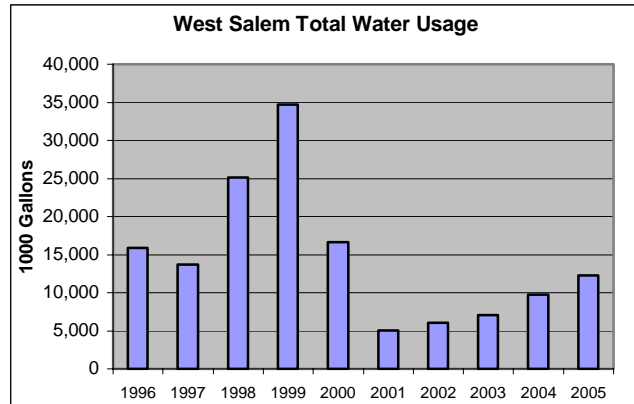


A full year's use of the mask washer increased its water based waste by 935 gallons. In addition, increased use of water based coating added 715 gallons of water based paint waste. Non-hazardous waste reduction is an objective for West Salem in 2006.

Water Use

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Gallons	15,842,000	13,713,100	25,105,920	34,725,900	16,652,880	5,011,000	6,032,900	7,030,500	9,715,000	12,270,000

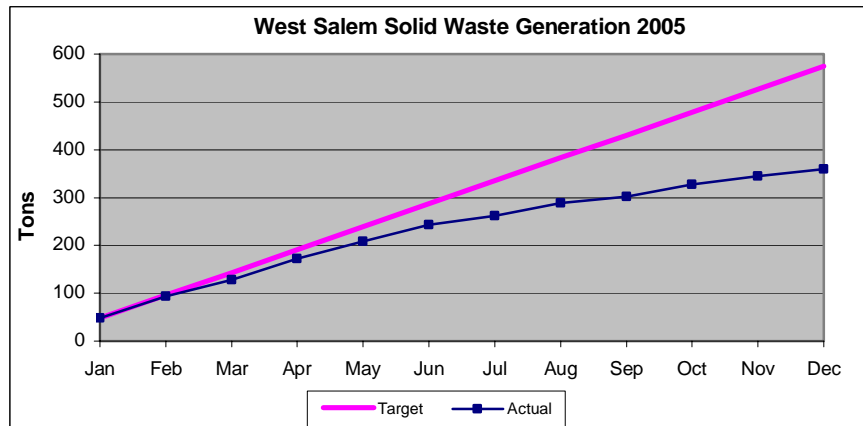
This increase is directly related to new production requirements for three additional washers. The facility EMS responded by converting a flow through non-contact cooling system to a chilled water close-loop system. The impact can be seen at W Salem's Objective 2, p. 21.



Appendix 3: West Salem's Objectives and Targets Program Results for 2005:

Objective 1: Reduce facility solid waste (compactor) generation by 10% 2005 vs. 2004

A comprehensive plastic recycling program was implemented in May, 2005. The facility responded enthusiastically and reduced its solid waste by 43% vs. 2004.



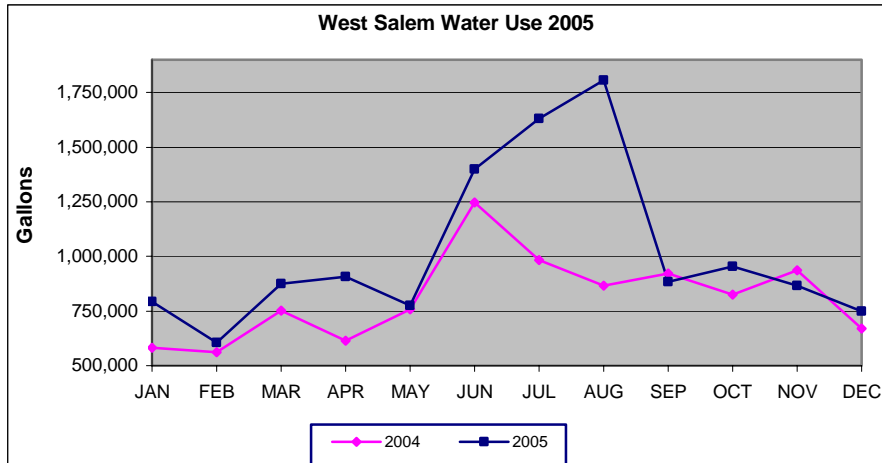
Objective 2: Reduce facility water usage

Target: Audit and report by 4/15/05

Target: Action Plan by 5/16/05

Target: Reduce the average monthly water use by 10% in the final four months of 2005 vs. the average of the first 8 months of 2005.

The average monthly water use for the final four months was 21% lower than the average for the first eight months. This was done by converting a traditional flow through non-contact cooling system to a chilled water closed-loop system.



Objective 3: Implement 3 significant energy savings projects by 12/31/05

The following major energy savings projects were implemented in 2005:

1. Paint selected areas of the roof white to reflect sunlight, reduce heat buildup, and serve as a pilot for further evaluation of effectiveness.

This proved very valuable and will be expanded in 2006.

2. Institute an air leak awareness and control program.

This established an internal team which then identified opportunities for significant improvement.

3. Implement an energy management program.

This was begun in 2005 with the assistance of Focus on Energy.

Objective 4: Improve product yield by achieving yields as reflected in improvement projects.

West Salem management identified ten priority jobs on which to focus for yield improvement.

These improvements resulted in a significant reduction in the use of related source materials and energy.

West Salem's 2006 Objectives and Targets:

Objective 1: Reduce facility compactor waste generation by 10% CY 2006 vs. CY 2005.

Objective 2: Reduce facility hazardous and non-hazardous waste generation.

Target: Audit and report by 4/13/06.

Target: Action Plan by 5/15/06.

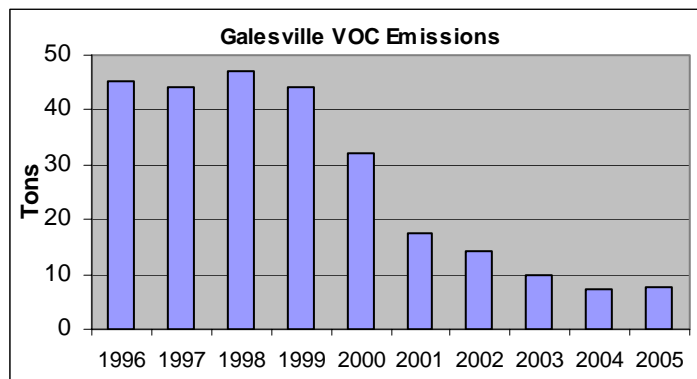
Objective 3: Implement three significant energy savings projects by 12/31/06.

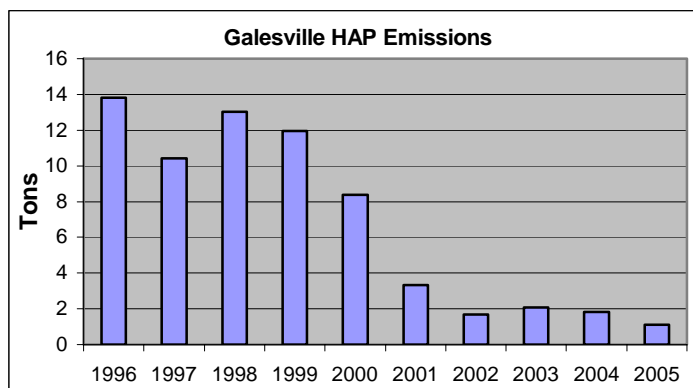
Objective 4: Achieve plant product yields as reflected in improvement projects.

Appendix 4: Galesville Data

Air Emissions

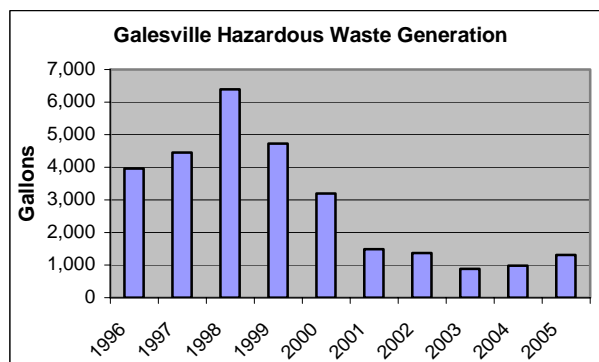
		1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
VOCs (tons/year)		45.1	44.2	47.0	44.0	32.0	17.5	14.1	9.7	7.3	7.5
NOx		0.62	0.7	0.8	0.7	0.54	0.31	0.29	.02	0.16	*
CO		0.13	0.1	0.15	0.1	0.12	0.06	0.06	.01	0.03	*
CLEAN AIR ACT HAPs (lbs/yr) Blank cells reflect no usage								*Awaiting data from the WDNR			
CHEMICAL NAME	CAS #	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Glycol Ethers		9,961	8,736	9,979	10,814	7,664	5,640	3,284	4,075	3,560	2,180
Cumene	98-82-8	628	756	521	528	514	479	4	1		
Ethyl Benzene	100-41-4		8	10	10	23	1	3	3		
Naphthalene	90-20-3	7	7	3	6	1		4	5	20	60
Toluene	108-88-3	16,224	11,306	15,417	12,378	8,463			10	20	
Hexane	110-54-3			2		1			4		
Xylene	1330-20-7	318	31	41	45	24	502	6	11	20	
Methyl Methacrylate	80-62-6			29	24	14	4		6		
Methanol	67-56-1				38	6	2				
m-Xylene	108-38-3						27				
2,2,4 Trimethylpentane	540-84-1							36	17	20	40
Trichloroethylene	79-01-6										20
Total (tons)		13.8	10.4	13.0	11.9	8.4	3.3	1.7	2.1	1.8	1.2





Appendix 4: Galesville Hazardous Waste Generation

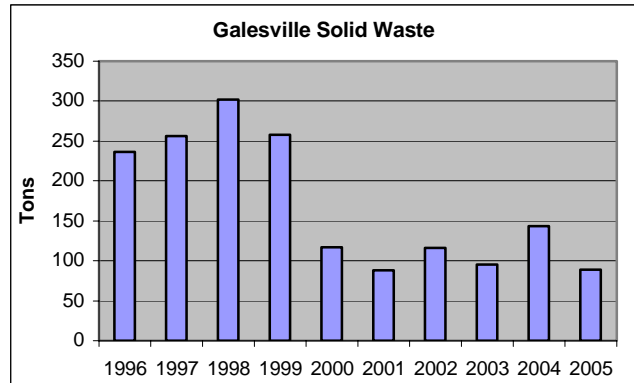
		1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Solvent Waste	gallons	1,705	1,540	2,255	2,090	1,540	495	275	0	0	55
Ink Waste	gallons	2,255	2,915	4,128	2,640	1,650	990	1,100	880	990	1,265
Total	gallons	3,960	4,455	6,383	4,730	3,190	1,485	1,375	880	990	1,320



Solid Waste

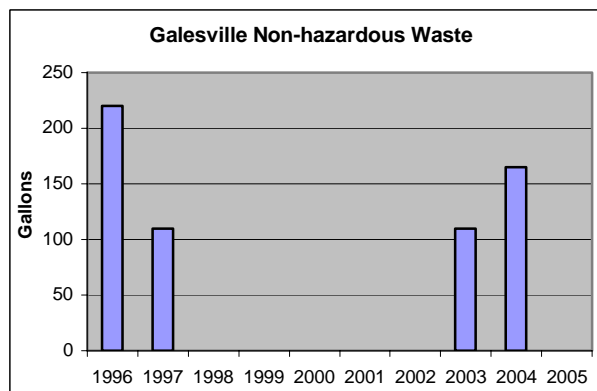
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
tons	236	256	302	258	117	88	116	95	143	89

The plastic recycling program established in May 2005 also made a positive impact on Galesville's solid waste stream.



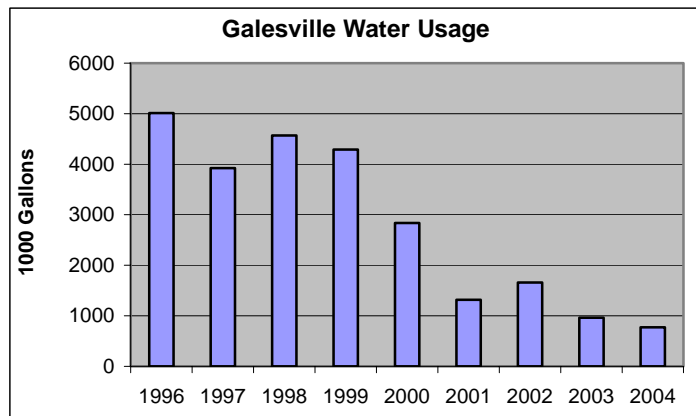
Appendix 4: Galesville Non-hazardous Waste Generation

	Unit	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Used Oil	gallons	165	110		0	0	0	0	110	165	0
Oil Absorbents	gallons	55	0	0	0	0	0	0	0	0	0
Total		220	110	0	0	0	0	0	110	165	0



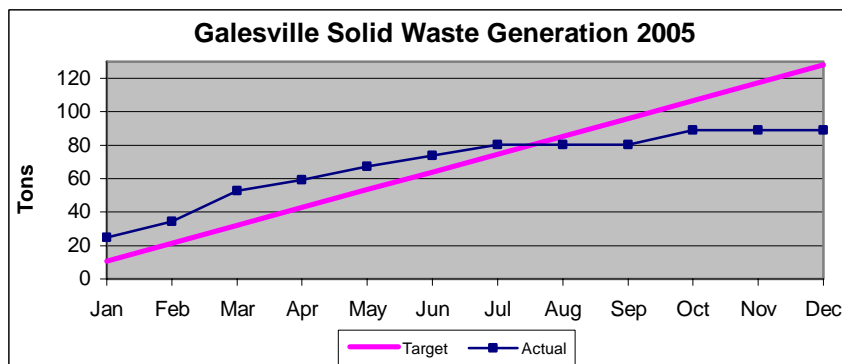
Water Use

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Gallons	5,008,124	3,929,300	4,575,600	4,294,400	2,835,300	1,312,100	1,659,800	965,100	769,100	607,500



Appendix 4: Galesville's Objectives and Targets Program Results for 2005

Objective 1: Reduce facility solid waste generation by 20% from projection of 160 tons for 2005. The recycling of plastic waste reduced facility solid waste generation to 89 tons. This is a 54 ton reduction from 2004 and is 44% below the projection for 2005.



Objective 2: Improve product yield by achieving yields as reflected in improvement projects. Galesville was also successful in improving yields and reducing the use of source materials and energy.

Galesville's 2006 Objectives and Targets:

Objective 1: Reduce facility energy use

Target: Identify a minimum of ten energy savings ideas by 3/1/2006

Target: Implement, at a minimum, three energy saving projects by 12/31/20006

Objective 2: Improve product yield by achieving yields as reflected in improvement projects

Note: On February 1, 2006, Northern Engraving Corporation announced that the Galesville facility will be closed in April, 2006.

Appendix 5: The Glossary

VOCs - Volatile organic compounds: Organic materials that evaporate into the air.

Examples: Solvents used for clean up or present in coatings, inks and sprays.

HAPs - Hazardous air pollutants: A group of hazardous chemicals listed by the EPA.

These chemicals are believed to carry a greater health risk.

Examples: toluene, xylene, glycol ethers, etc.

RACT – Reasonably available control technology: Application of RACT provisions provide the lowest emission rate that a particular source is capable of achieving by the application of control technology that is reasonably available considering technological and economic feasibility. Such technology may previously have been applied to similar, but not necessarily identical, source categories.

LACT – Latest available control technology: This is required when it is determined that a source is technologically infeasible of controlling 85% of its organic compounds. LACT control measures are determined by the permit writer taking into account the control techniques and operating practices used by similar facilities.

NOx – Nitrogen oxides (Emission amounts are determined by the WDNR from data provided by Northern Engraving Corporation.)

CO – Carbon monoxide (Emission amounts are determined by the WDNR from data provided by Northern Engraving Corporation.)

MCF - Thousand cubic feet: The standard measure of volume for natural gas used.

KWH - Kilowatt-hours: The standard measure for electricity used.

YTD – Year-to-Date

Hazardous Waste: Waste with a chemical composition or other properties that make it capable of causing illness, death or some other harm to humans and other life forms when managed or released to the environment. Hazardous wastes are characterized for ignitability, corrosivity, reactivity, and toxicity. The vast majority of Northern Engraving's hazardous waste is characterized as ignitable or corrosive.

Solid Waste: All waste sent to a landfill or an incinerator.

Questions and requests for additional information should be directed to Bruce Corning at the address below:

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Submitted April 13, 2005
by Bruce Corning